

I claim:

1. A pickup unit for stringed instruments, comprising:
a single removable pickup housing adapted to be mounted within a sound hole of
5 a stringed instrument;
three pickup sensors on the stringed instrument connected to the pickup housing;
tuning members for each of the pickup sensors on the housing easily adjustable by
a user of the instrument; and
a connector for connecting the pickup housing to an external amplifier.
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2. The pickup unit of claim 1, wherein the stringed instrument includes:
an acoustic guitar.
3. The pickup unit of claim 1, wherein the three pickup sensors include:
15 a magnetic sensor, a piezoelectric transducer, and a microphone.
4. The pickup unit of claim 1, wherein the tuning members include:
rotatable knobs.
- 20 5. The pickup unit of claim 1, further comprising:
a master volume control for controlling overall volume of the three pickup sensors
with a single knob.
6. The pickup unit of claim 1, further comprising:

a clamp for mounting the pickup unit inside the sound hole of the stringed instrument, without causing damage to the stringed instrument.

7. The pickup unit of claim 1, further comprising:

5 a pre-amp for the three pickup sensors inside of the pickup unit.

8. The pickup unit of claim 1, further comprising:

a battery inside of the pickup unit for supplying power to the pickup unit.

10 9. The pickup unit of claim 1, wherein the housing includes:

dimensions of up to approximately 4 & ¼ inches wide by approximately 1 inch high by approximately 1 inch deep.

10. A method of adjusting a broad range of audio frequencies emanating from an instrument with strings, a bridge, a sound board and a sound box, comprising the steps of:

sensing acoustic wave pressures absorbed in the sound board of the stringed instrument;

detecting mechanical resonate energy from the bridge of the string instrument;

detecting motion of the string in the string instrument; and

20 combining the sensing step, the mechanical resonate energy detecting step and the string motion detecting step for connection to an exterior amplifier.

11. The method of claim 10, further comprising the step of:

mounting a single unit inside of the sound box of the stringed instrument for the combining and the controlling step, without causing damage to the stringed instrument.

12. The method of claim 11, wherein the mounting step includes the step of:

5 clamping edges of the sound board adjacent to the sound box with a portion of the inside mounted single unit.

13. The method of claim 11, further comprising the step of :

pre-amplifying the sensing step, the mechanical resonate energy detecting step and
10 the string motion detecting step within the single mounted unit.

14. The method of claim 10, wherein the sensing step includes the step of:

providing a condenser microphone for the sensing step.

15 15. The method of claim 10, wherein the mechanical resonate energy detecting step includes the step of: providing a piezo pressure transducer.

16. The method of claim 10, wherein the string motion detecting step includes the step of: providing a magnetic transducer.

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17. The method of claim 10, further comprising the step of:

individually controlling the sensing step, the mechanical resonate energy detecting step and the string motion detecting step with separate rotatable knobs.

18. The method of claim 10, further comprising the step of:
controlling overall volume of the sensing step, the mechanical resonate energy
detecting step and the string motion detecting step, with a single rotatable knob.

5 19. The method of claim 10, further comprising the step of:
individually controlling the sensing step, the mechanical resonate energy detecting
step and the string motion detecting step with separate rotatable knobs; and
controlling overall volume of the sensing step, the mechanical resonate energy
detecting step and the string motion detecting step, with a single rotatable knob.

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20. The method of claim 10, further comprising the step of:
tone modifying sound outputs from the sensing step, the mechanical resonate
energy detecting step and the string motion detecting step with three separate external
amplifiers.